

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

1. (currently amended) A radioactive source suitable for use in brachytherapy comprising:
a biocompatible echogenic container;
a radioactive isotope of iodine in the form of iodide ions or an iodine-containing compound containing covalently bonded iodine wherein the iodine is bonded to at least one other atom which is not a halogen, wherein said iodine containing compound is, adsorbed on the surface of a substantially non-radiation attenuating substrate, with the proviso that when the iodine is in the form of iodide ions, then the substrate is not an ion exchange resin;
wherein said substrate and said adsorbed iodine ~~is~~are sealed within said container.
2. (Canceled)
3. (Canceled)
4. (Previously presented) The radioactive source of claim 1 wherein the isotope of iodine is iodine-125.
5. (Previously presented) The radioactive source of claim 1 which has an activity in the range of about 200 mCi to about 1200 mCi.

6. (Previously presented) The radioactive source of claim 1 which has an activity in the range of about 0.1 to about 5 mCi.
7. (Previously presented) The radioactive source of claim 1 wherein the iodine containing compound is an iodohalogen compound, an organic compound containing a carbon-iodine bond, an iodoso-compound, a diaryliodinium salt, an N-iodoamide, an iodoxy aryl compound or a covalently bonded inorganic iodide compound.
8. (Previously presented) The radioactive source of claim 1 wherein the substrate is at least partially formed from a material selected from the group consisting of carbon, alumina, a zeolite, a titanium oxide, silica, a silicon oxide, a zeolite-type trivalent metal silicate, a metal phosphate, a metal hydroxyphosphate, a glass, aluminum nitride, a ceramic, a radiation resistant polymer, bone, coral, coal, limestone, cellulose, starch, agar, gelatin, chitin and hair.
9. (Previously presented) The radioactive source of claim 1 wherein the substrate is carbon.
10. (Previously presented) The radioactive source of claim 1 further comprising a binder.

11. (Canceled)

12. (Canceled)

13. (Previously presented) A method of treatment of a condition which is responsive to radiation therapy which comprises the temporary placement of the radioactive source of claim 1 at the site to be treated within a patient for a sufficient period of time to deliver a therapeutically effective dose.

14. (Previously presented) A method for the inhibition of restenosis at a site within the vascular system of a patient which has previously been subjected to PTCA, the method comprising the temporary placement of the radioactive source of claim 1 at the site to be treated within a patient for a sufficient period of time to deliver a therapeutically effective dose.

15. (Canceled)